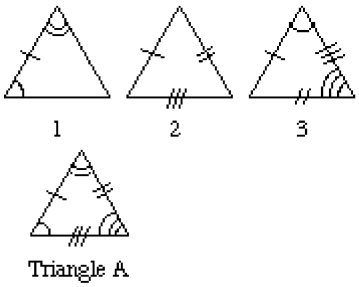
Name: _____ **Block:** ___ **Date:** _____ **ID: A**

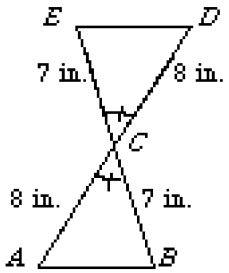
Geometry Unit 3 - Quiz 2 practice for wiki Kuhowski

Short Answer

1. Determine whether each triangle is congruent to Triangle A below. If so, explain how the it is congruent to Triangle A.



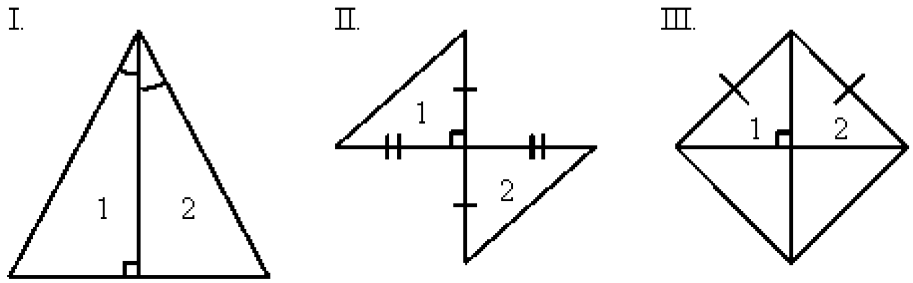
2. Tell whether ΔABC and ΔDEC are congruent. Explain how you know.



Not drawn to scale

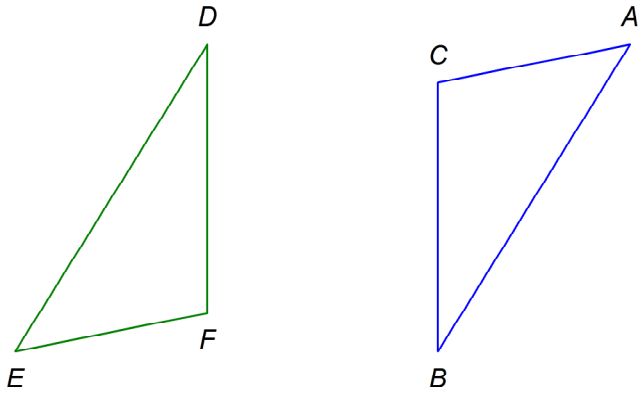
Multiple Choice
Identify the choice that best completes the statement or answers the question.

3. For which situation could you prove $\Delta 1 \cong \Delta 2$ using the HL Theorem?



a. II and III b. I and II c. II only d. I only

4. The two triangles below are congruent. Which side corresponds to $\overline{DE}$?



a. $\overline{BA}$
b. $\overline{AC}$
c. $\overline{EF}$
d. $\overline{BC}$

5. $\Delta ABC \cong \Delta DEF$. Find EF and $m\angle D$. If necessary, round your answer to the nearest tenth.

Not drawn to scale

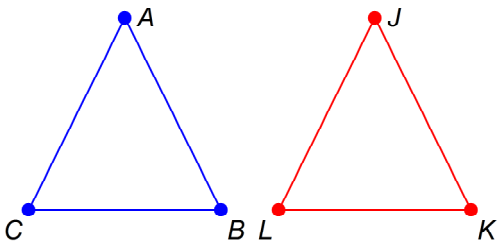
a. 12; 64°
b. 11; 26°
c. 5; 26°
d. 5; 64°

6. $\Delta ABC \cong \Delta DEF$. Find $m\angle B$ and $m\angle C$. If necessary, round your answer to the nearest tenth.

Not drawn to scale

a. 90°; 22° b. 68°; 90° c. 90°; 68° d. 22°; 68°

7. Below are two triangles.



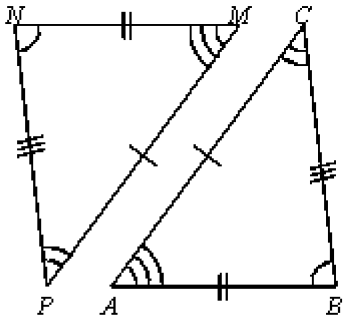
segment AC = segment JL *angle A = angle J*

segment AB = segment JK

Based on the information given about the triangles, what method could be used to prove the two triangles are congruent?

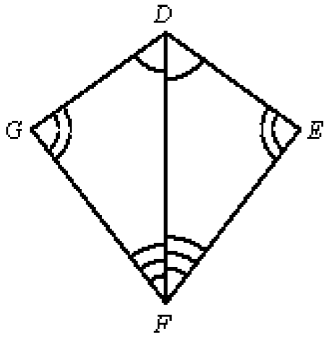
a. SAS
b. The triangles cannot be proven congruent.
c. ASA
d. SSS

8. $\angle ACB \cong$ __?__



a. $\angle PNM$ b. $\angle PMN$ c. $\angle NMP$ d. $\angle MPN$

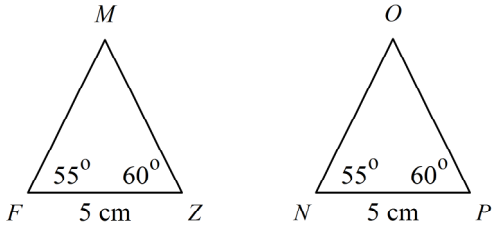
9. From the information in the diagram, can you prove $\Delta FDG \cong \Delta FDB$? Explain.



a. yes, by SAS
b. yes, by AAA
c. yes, by ASA
d. no

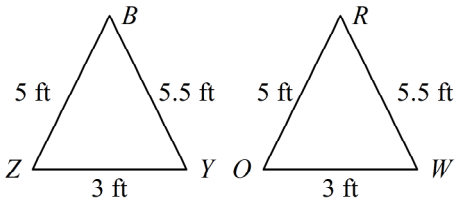
Write a congruence statement for the pair of triangles.

10.



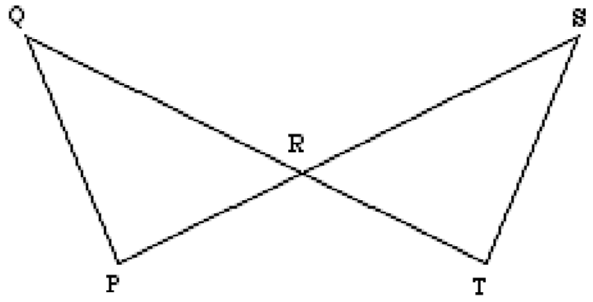
a. $\Delta FZM \cong \Delta PNO$ by SAS
b. $\Delta FZM \cong \Delta PON$ by ASA
c. $\Delta FZM \cong \Delta NPO$ by SAS
d. $\Delta FZM \cong \Delta NPO$ by ASA

11.



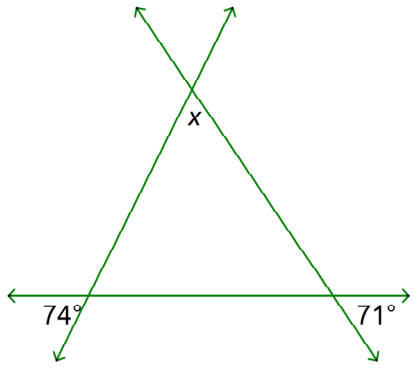
a. $\Delta ZYB \cong \Delta OWR$ by SSS
b. $\Delta ZYB \cong \Delta WOR$ by SSS
c. $\Delta YZB \cong \Delta OWR$ by SAS
d. $\Delta ZYB \cong \Delta OWR$ by SAS

12. $\overline{QR} \cong \overline{SR}$ and $\overline{PR} \cong \overline{TR}$. Select the correct congruence statement for the two triangles. What rule proves the congruence?



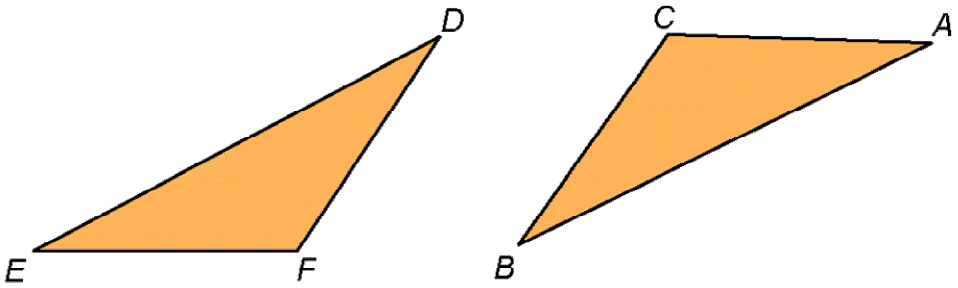
a. $\Delta QPR \cong \Delta RTS;$ SAS
b. $\Delta QPR \cong \Delta STR;$ SAS
c. $\Delta QPR \cong \Delta STR;$ ASA
d. $\Delta QPR \cong \Delta RTS;$ SSS

13. Three lines intersect to form the triangle shown below. What is the value of x in degrees?



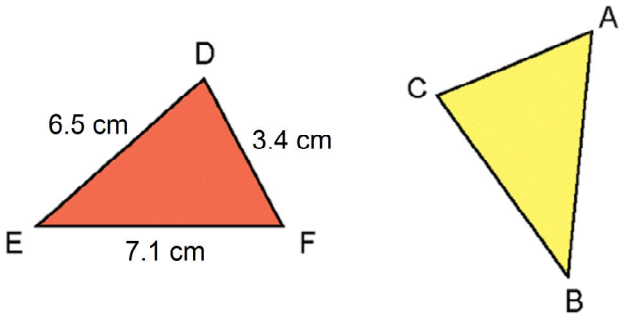
a. 45°
b. 215°
c. 35°
d. 72.5°

14. In the figure below $\Delta ABC \cong \Delta EDF$. Which angle corresponds to $\angle C$?



a. $\angle A$
b. $\angle F$
c. $\angle E$
d. $\angle D$

15. Triangle *ABC* is congruent to Triangle *DEF*. What is the length of $\overline{AB}$?

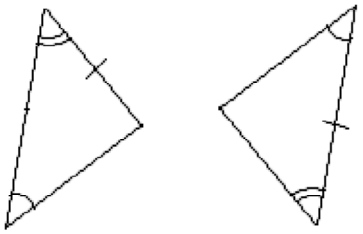


a. 3.4 centimeters
b. 3.2 centimeters
c. 7.1 centimeters
d. 6.5 centimeters

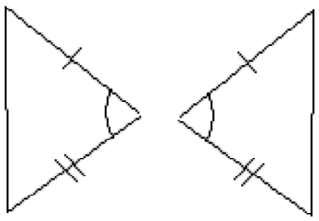
16. Given $\Delta QRS \cong \Delta TUV$, $QS = 3v + 5$, and $TV = 6v - 7$, find the length of QS and TV.
a. 17 b. 4 c. 31 d. 18

17. In each pair of triangles, parts are congruent as marked. Which pair of triangles is congruent by ASA?

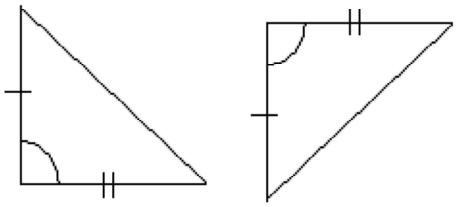
a.



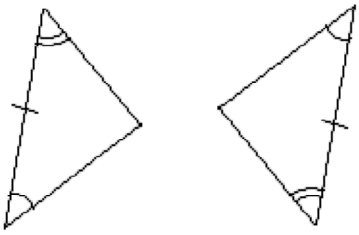
c.



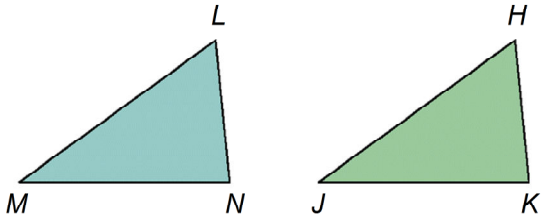
b.



d.

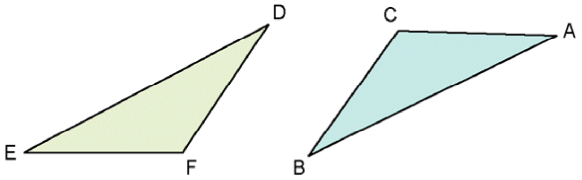


18. In the following figure, $\Delta LMN \cong \Delta HJK$. If $m\angle L = 58.6°$, $m\angle M = 38.9°$, and $m\angle N = 82.5°$, what is the measure of $\angle J$?



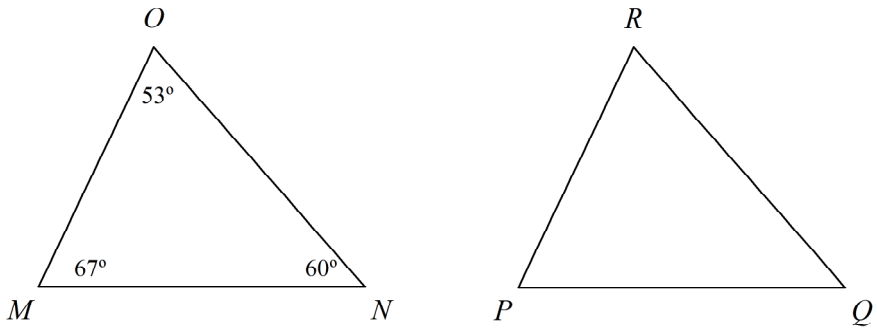
a. 58.6°
c. 38.9°
b. 44.5°
d. 82.5°

19. In the figure below, $\Delta ABC \cong \Delta EDF$. If $m\angle A = 28°$ and $m\angle C = 118°$, what is the measure of $\angle E$?



a. 118°
c. 34°
b. 152°
d. 28°

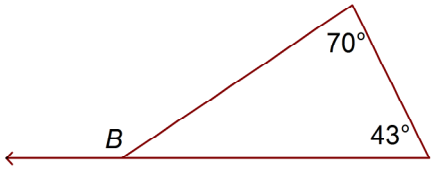
20. $\Delta MNO \cong \Delta PQR$



a. $\angle N \cong \angle$ _____
b. $\angle O \cong \angle$ _____

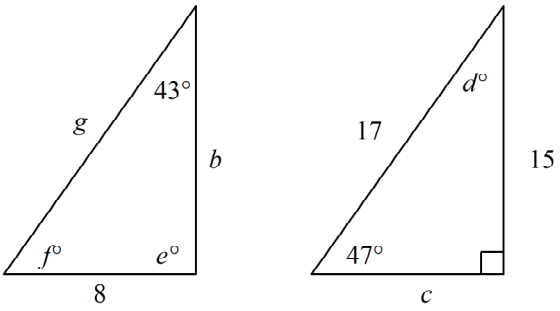
a. $\angle R$; $\angle Q$
b. $\angle P$; $\angle R$
c. $\angle Q$; $\angle R$
d. $\angle Q$; $\angle P$

21. What is the measure, in degrees, of the angle marked *B*?



a. 43
b. 70
c. 113
d. 67

22. The two triangles are congruent as suggested by their appearance. Find the value of *c*. The diagrams are not to scale.



a. 17
b. 8
c. 43
d. 15

Geometry **Unit 3 - Quiz 2 practice for wiki** **Kuhowski**
Answer Section

SHORT ANSWER

1. Triangle 1 is congruent to Triangle A by ASA. Triangle 2 is congruent to Triangle A by SSS. Triangle 3 is not congruent to Triangle A.
2. $\Delta ABC \cong \Delta DEC$ by Side-Angle-Side (SAS)

MULTIPLE CHOICE

3. A
4. A
5. C
6. C
7. A
8. D
9. C
10. D
11. A
12. B
13. C
14. B
15. D
16. A
17. D
18. C
19. D
20. C
21. C
22. B